AUGUST 1992

ANIMAL HEALTH CONDITIONS FOR THE IMPORTATION INTO GREAT BRITAIN OF BREEDING PIGS FROM THE UNITED STATES

The pigs shall be accompanied by a certificate signed by a full-time salaried veterinary officer of the Federal Government of the United States giving the description, ear number, age, sex, and address of the premises of origin of the pigs to be exported and stating that:

GENERAL CONDITIONS

1. The pigs to be exported were born and have since birth lived continuously in the United States.

COUNTRY DISEASE CLEARANCES

2. (i) No clinical or other evidence of foot-and-mouth disease, African swine fever, classical swine fever, swine vesicular disease, Teschen disease, or vesicular exanthema has occurred in the United States during the 12 months immediately prior to the date of export nor has vaccination against these diseases been practiced in the United States during this period.

   (ii) No clinical evidence of vesicular stomatitis has occurred in the United States during the 6 months immediately prior to the date of export nor has vaccination against this disease been practiced in the United States during that period.

STATE CLEARANCE

3. No clinical or other evidence of vesicular stomatitis has occurred in the State in which the premises of origin are situated and within 50 km of the premises of origin during the 6 months immediately prior to the date of export.

AREA CLEARANCE

4. As far as can be ascertained, and after due enquiry of the appropriate State veterinary diagnostic laboratory, there has been no clinical evidence of the syndrome known as mystery swine disease (MSD) or swine infertility and respiratory syndrome (SIRS) or porcine respiratory and reproductive syndrome (PRRS) in the municipality (County) during the 3 months immediately prior to the date of export.

PREMISES CLEARANCES

5. The pigs to be exported have been resident on the premises of origin since birth.

6. A. The pigs originate from premises at which immediately prior to entry to preexport quarantine no evidence (clinical, serological, or pathological) has been recorded which leads to the conclusion that:

(i) rabies has occurred during the previous 6 months;

(ii) atrophic rhinitis, Aujeszky's disease, leptospirosis, Streptococcus suis type 2 infection, swine influenza, transmissible gastro-enteritis, trichinosis, tuberculosis, or vesicular stomatitis has occurred during the previous 12 months;

(iii) brucellosis (including Brucella abortus, Brucella melitensis, Brucella suis), has occurred during the previous 3 years.

B. The pigs originate from premises at which there has been no clinical or pathological evidence of atrophic rhinitis or of the syndrome known as MSD, or SIRS, or PRRS, during the 12 months immediately preceding the entry of the pigs into preexport quarantine.

7. The pigs to be exported have not been vaccinated against Aujeszky's disease, brucellosis, leptospirosis, rabies, swine influenza or transmissible gastroenteritis nor had vaccines against these diseases been used on the premises of origin during the 12 months prior to entry to preexport quarantine.

<u>BRUCELLA SUIS HERD TESTS</u>

8. EITHER (i) certification that Brucella suis infection has not been recorded in any susceptible species in the United States during the 3 years immediately prior to export.

OR (ii) during the 6 months immediately prior to entry of the pigs to be exported into the preexport quarantine, all boars and 10 percent of the adult breeding sows were subjected to the complement fixation test for brucellosis (using Br. abortus antigen) with negative results. (Negative is a reaction at less that 10 icftu/ml). A minimum of 40 sows were sampled or, in the cases of herds with less than 40 sows, all sows on the premises were sampled.

DECLARATIONS

9. A written declaration has been received from the owner of the animals stating that as far as can be determined;

(i) the sires, dams and siblings of the pigs to be exported have shown no evidence of genetic defects;

(ii) none of the female pigs have been mated either naturally or artificially, neither have they been the recipient of an embryo and none of the male pigs to be exported has been used for natural service in any herd other than on the premises of origin.

10. On examination by the certifying officer, the animals to be exported showed no evidence of genetic defects.

ON FARM ISOLATION TESTING

11. All pigs to be exported were isolated from all other animals on the premises of origin for at least 30 days immediately prior to entry into preexport quarantine under arrangements approved by a veterinary officer of the Federal Government of the United States and during this period were subjected to the following tests with negative results; the tests where appropriate having been performed at an officially approved laboratory:

(i) the single intradermal tuberculin test using both avian and bovine tuberculins (a negative result means no increase in skin thickness or any reaction showing oedema or erythema to either tuberculin when read at 72 hours);

(ii) the complement fixation test for brucellosis using Brucella abortus antigen (negative is a reaction at less than 10.0 icftu/ml);

(iii) the enzyme-linked immunosorbent assay (ELISA) for Aujeszky's disease using the protocol at Appendix 1;

(iv) the haemagglutination inhibition test for swine influenza using the protocol at Appendix 1;

(v) the serum neutralization test for transmissible gastroenteritis using the protocol at Appendix 1;

(vi) EITHER (a) the microscopic agglutination test, using live antigen, for leptospira (serotypes australis, grippotyphosa, pomona and tarassovi) with negative results (negative is less than 50 percent agglutination at a serum dilution of 1:100;

OR (b) the pigs received 2 injections of dihydrostreptomycin (25

mg per kg live body weight) at an interval of 14 days, the second injection being made within 24 hours of the intended date of entry into preexport quarantine accommodation.

MOVEMENT TO PREEXPORT QUARANTINE

12. Immediately prior to the removal of the pigs to be exported to the approved preexport quarantine station they were examined by a full-time salaried veterinary officer of the Federal Government of the United States and found to be free from all signs of infectious or contagious disease, including ectoparasitism. All other pigs on the premises of origin were inspected and showed no evidence of infectious or contagious disease.

13. The pigs were moved from their premises of origin to the preexport quarantine station in road or rail vehicles which had been thoroughly cleansed and disinfected under the supervision of a full time salaried veterinary officer of the Federal Government of the United States. While in transit the pigs were not unloaded and did not come into contact with animals not similarly certified.

14. The pigs to be exported were isolated in quarantine accommodation, approved by the Federal Government Veterinary Services for export purposes, so that they had no direct or indirect contact with animals not similarly certified.

PREEXPORT QUARANTINE AND TESTING

15. While in preexport quarantine accommodation all pigs to be exported were again subjected to the following tests with negative results. These tests were not commenced until all pigs to be exported had been resident in the preexport quarantine premises for at least 21 days:

(i) the complement fixation test for brucellosis using Brucella abortus antigen (negative is a reaction at less than 10.0 icftu/ml);
(ii) the serum neutralization test for Aujeszky's disease using the protocol at Appendix 1;
(iii) the haemagglutination inhibition test for swine influenza using the protocol at Appendix 1;
(iv) the serum neutralization test for transmissible gastroenteritis using the protocol at Appendix 1;
(v) the serum neutralization test for vesicular stomatitis (types New Jersey and Indiana);
(vi) the microscopic agglutination test, using live antigen, for leptospira (serotypes australis, grippotyphosa, pomona, and tarassovi) with negative results (negative is less than 50 percent agglutination at a serum dilution of 1 in 100) UNLESS the animals were treated with dihydrostreptomycin as in paragraph 10.

16. The pigs were kept in the preexport quarantine station for at least 30 days and during the period in the quarantine station they were subject to occasional Government veterinary supervision and showed no signs of infectious or contagious disease including ectoparasitism.

17. During the whole of the period of the detention of the pigs in the quarantine station no animals not certifiable for export to Great Britain were in the quarantine station and no person having access to the pigs tended any other stock during that period except animals to be exported to Great Britain in accordance with the conditions of a license made by the Minister of Agriculture, Fisheries, and Food or Secretary of State for Wales or Scotland permitting importation of the animals into Great Britain.

SHIPMENT

18. The pigs to be exported were delivered from the quarantine station to the vessel/aircraft in which they were to leave the United States for Great Britain in vehicles which had been previously cleansed and disinfected, and during the journey had no direct or indirect contact with animals not similarly certified.

19. At the time of shipment to Great Britain the pigs were examined by a full-time salaried veterinary officer of the Federal Government of the United States and found to be healthy and showed no evidence of infectious or contagious disease including ectoparasitism.

20. The receptacle/vessel/aircraft in which the pigs left the United States for Great Britain had been previously cleansed and disinfected to the satisfaction of a full-time salaried veterinary officer of the Federal Government of the United States and at the time of loading of the pigs there was no direct or indirect contact with animals not similarly certified.

NOTE 1: In the event of any signs of infectious or contagious disease being observed during the 30 day quarantine period or of any pigs failing any of the tests specified in these conditions the facts must be notified immediately to:

SVO (Import of Livestock Section) Ministry of Agriculture, Fisheries, and Food Hook Rise South, Surbiton, Surrey, KT6 7NF, Telephone: 081-330 4411, Telex No. 22203 AHSURB G

APPENDIX 1

A. Aujeszky's disease - ELISA test using the protocol below on two occasions, at a minimum interval of 21 days:

Protocol - The serum neutralization test shall be carried out according to the following: The constant virus-varying serum neutralization test should be performed using a microtiter test employing VERO cells or other sensitive cell systems. Aujeszky's disease virus should be used at 100 TCID 50 per .025ml; inactivated undiluted serum samples are mixed with an equal volume (.025 ml) of virus suspension. The virus/serum mixtures should be incubated for 1 hour at 37^0C in the microtiter plates before adding the appropriate cells. Cells are used at a concentration which forms a complete monolayer after 24 hours. Each well receives .05 ml of cell suspension.

Serum: All sera are heat-activated at 56^0C for 30 minutes before use.

Controls:
- virus infectivity assay,
- serum toxicity controls,
- uninoculated cell culture controls,
- reference antisera

Interpretation: The results of the neutralization test and the titer of the virus used in the text are recorded after 3 to 7 days incubation at 37^0C. Serum titers less than one in two are considered negative.

Various ELISAs for the serological diagnosis of Aujeszky's disease have been described. These tests may be used provided that they have sensitivity and specificity at least equal to that of the method defined above.

B. Swine influenza - Haemagglutination inhibition test using the protocol below:

These tests are performed by standard methods (U.S. Department of Health, Education, and Welfare, Immunology series No.6) using the A/Swine/Wisconsin/IS/30 and A/Swine/Belgium/ 1/79 (H1N1) strains or A/Swine/Iowa/19/30 (H1N1). To destroy unspecific inhibitors, swine sera should be treated with either receptor destroying enzyme (Vibrio cholerae filtrate) overnight at 37^0C followed by heating at 56^0C for 30 minutes to destroy residual enzyme activity, or by treating with 25 percent kaolin overnight at 4^0C (Clarke and Casals 1958, American Journal for Tropical Medicine and Hygiene, 7, 561).

After absorption with a 50 percent suspension of chicken erythrocytes for 1 hour at 37^0C, sera are tested against four haemagglutinating units of virus using .5 percent chicken erythrocytes. Virus and serum should be left in contact for 60 minutes at room temperature before adding erythrocytes.

Titers of one-tenth or greater are considered positive.

C. Transmissible Gastroenteritis - Serum neutralization test using the protocol below:

Protocol: The constant virus-varying serum neutralization test should be performed using a microtiter employing A72 (Dog Tumour) cells or other sensitive pig cell systems. TGE virus should be used at 100 TCID 50 per volume; inactivated (undiluted) serum samples are mixed with an equal volume of .025 ml of virus suspension. The virus/serum mixture should be incubated for 30 to 60 minutes at 37^0C in the microtiter plates before adding the appropriate cells. Cells are used at a concentration which forms a complete monolayer after 24 hours. Each well received .1 ml of cell suspension.

Serum: All sera are heat-inactivated at 56^0C for 30 minutes.

Controls:
- virus infectivity assay,
- serum toxicity controls,
- uninoculated cell culture controls,
- reference antisera

Interpretation: The results of the neutralization test and the titer of virus used in the test are recorded after 3 to 5 days incubation at 37^0C. Serum titers less than one on two (final dilution) are considered negative. If undiluted serum samples are toxic to the tissue cultures, these sera may be diluted 1:2 before being used in the test. This will be equivalent to 1:4 final dilution of serum. Serum titers of less than 1 in 4 (final dilution) are considered negative in these cases.